

Fall Semester 2019

**Biology III
Molecules, Genes, & Cells**

**Course Reader
& Lab Manual**

to accompany *Life: The Science of Biology*, 11th ed., by Sadava et al.

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<https://bio.davidson.edu/courses/BioIII/studyguide.html>

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Notes on Using the Biology III Course Reader

The format for Biology III at Davidson College is very different from most introductory courses. Although we will cover similar material as traditional introductory biology classes do, we will cover the material in a different order. We will learn information in the context of interesting questions and on a “need-to-know” basis. It may take you a little time to adjust to this format, but this approach is very similar to the way you normally learn in your “real” life. You don’t read an encyclopedia just to learn, you look up a particular topic about which you want to know more. Therefore, we will use the *Sadava et al.* textbook as a reference source in conjunction with this *Course Reader*. The *Course Reader* contains important information as well as points to sections in the text to read.

This *Course Reader* includes four types of reading assignments that should be **read before class**.

- 1) 📖 Overview Skimming – skim headings/topics quickly to get a general idea of the content.
- 2) 📖 Focused Reading -- read carefully and learn the material presented.

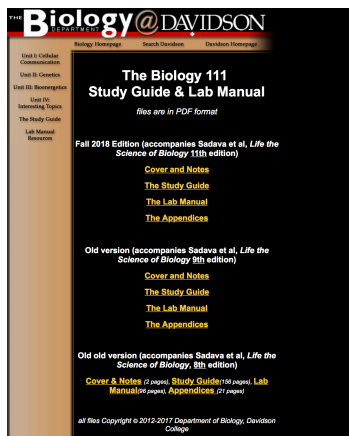
3) 📖 Web Reading – read the web pages carefully.

4) 📖 News Items – read these at your leisure – they illustrate current biological research.

You should be able to answer the study questions found throughout this *Course Reader*, but you do not need to turn in written answers in to your instructor. Some of these questions will be discussed in class (so be prepared to answer them in class), and your exam questions may resemble some of the *Course Reader* questions.

This *Course Reader* is a *community* document that is revised every semester with input from Bio III students and faculty. Consequently, your feedback is very valuable in this process. If you notice an interesting example of biology in the news that would make a good “news item,” have suggestions for improving the *Course Reader*, and/or notice a typo, please forward your comments to your professor or to Dr. Barsoum (mabarsoum@davidson.edu).

Web reading mentioned throughout this *Course Reader* as well as a PDF version of the document can be found at:
<https://bio.davidson.edu/courses/BioIII/studyguide.html>



Dedication

The first edition of the Course Reader was written in 1993 by Dr. Jan Serie as part of an HHMI grant to Macalester College. Jan created the Course Reader concept and developed many stories we still use. Jan died of cancer in September, 2008, but her memory and legacy continue to live on in all those who have benefited from her creativity and inspiration.